

Seven tergites present in the female; the eighth forms part of the ovipositor. Two to three weak bristles or coarse bristly hairs are present in the posterior corners of tergites two to six. Male terminalia conspicuous with upper forceps well developed, non-rotated. Female genitalia short, thrust obliquely upward with the terminal portion held at right angles; no spines.

Genotype: *Dasygogon hirtipes* Macquart.

Material studied: a male and a female from the Hermann collection.

Distribution: neotropical, 1 species (Chile area).

THREE NEW NEOTROPICAL TYPHLOCYBINE LEAFHOPPERS FROM ECONOMIC PLANTS.

By DAVID A. YOUNG, JR.,¹ Washington, D. C.

Among the many new species of exotic leafhoppers submitted for identification each year, some are associated with economic plants, and names for these species are desirable, especially when taxonomic treatment of the groups to which they belong is not to be completed in the immediate future. The three species described below are examples.

Empoasca yusti n. sp.

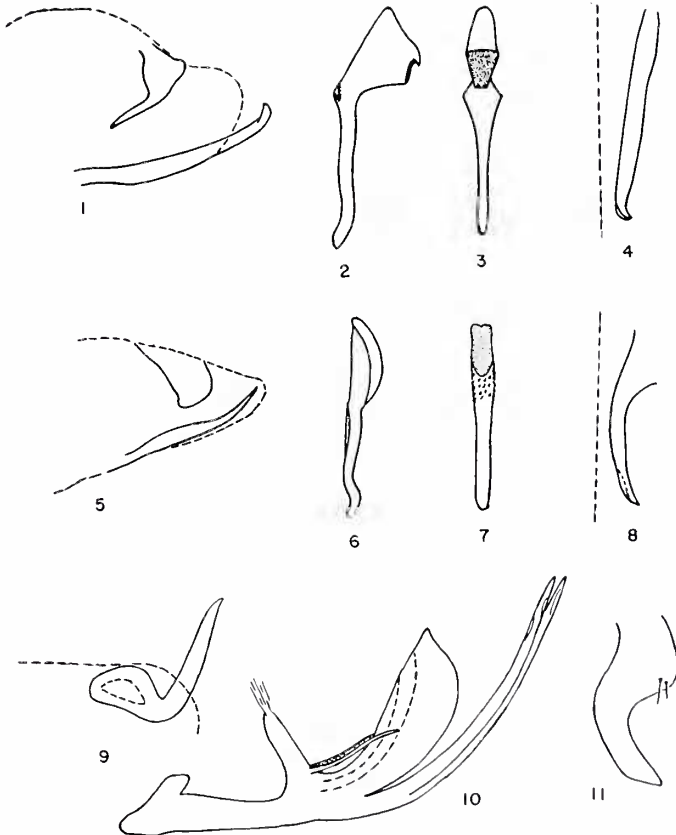
Length of male 3.3 mm., of female 3.6–3.8 mm. Alcoholic material with an area on crown next each eye, and the basal angles of the scutellum, buff; forewing with yellow reflections. Male with sternal abdominal apodemes traversing two or three abdominal conjunctivae; genital capsule with anal processes broad basally, each tapered abruptly in basal half, slender and gradually tapered in apical half to acute apex, directed anteroventrad and extending to middle of pygofer disc; ventral pygofer processes exceeding posterior pygofer margin, each in lateral aspect gradually, slightly curved dorsad through most of length, the apex curved sharply dorsad and rotated laterad, in ventral aspect the two ventral pygofer processes convergent throughout length but not contiguous apically; aedeagus in lateral aspect with shaft abruptly tapered, appearing truncate at gonopore which is apical.

Male type (cat. no. 63034) and a series of paratypes of both

¹ Entomology Research Branch, Agricultural Research Service, United States Department of Agriculture.

BULL. B. E. S. VOL. LI

PLATE V



Figs. 1-4. *Empoasca yusti* n. sp.: 1, male pygofer, lateral aspect; 2, aedeagus, lateral aspect; 3, same, caudal aspect; 4, pygofer process, caudoventral aspect (broken line represents midline of specimen). Figs. 5-8. *Empoasca fontesi* n. sp., same structures as in *yusti*. Figs. 9-11. *Dikrella (Readionia) gossypii* n. sp.: 9, male pygofer, caudodorsal portion; 10, aedeagus, lateral aspect; 11, apex of right style, dorsal aspect.

sexes, Pomasqui, Ecuador, 8-X-53, from potato, and paratypes of both sexes, Paute, Ecuador, Aug. 11, 1955 (H. R. Yust), on walnut, in U. S. National Museum collection.

The form of the anal process is similar to that of *martorelli* Metcalf from Puerto Rico, *acantha* Davidson and DeLong from Mexico, and *caverna* Davidson and DeLong from central United States, but the form of the pygofer process will serve to separate *yusti* from any of these.

Among the species of *Empoasca* received from Mr. Yust from potato in Ecuador were this new species, *fabac* (Harris), *stevensi* Young, and a species near *cothurna* Davidson and DeLong.

***Empoasca fontesi* n. sp.**

Length of both sexes 3.0–3.2 mm. Alcoholic material evenly suffused with yellow dorsally except disc of scutellum which is white. Male with sternal abdominal apodemes traversing two abdominal conjunctivae; genital capsule with anal processes broad and lobelike, directed ventrad and extending to middle of disc of narrow pygofer; ventral pygofer processes not attaining posterior pygofer margin, each in lateral aspect gradually tapered, acute at apex, curved gradually caudodorsad, in ventral aspect the two processes shaped like reversed parentheses; aedeagus without processes, with axis of shaft only slightly diverging from axis of preatrium; shaft with caudoventral surface ornamented with minute denticles; gonopore antepical on caudoventral surface.

Male type and a series of paratypes of both sexes, Bahia, Brazil, 26-IX-1955 (J. T. Fontes), from fig tree, in U. S. National Museum collection (Cat. No. 63035).

This species is not very similar in genitalia to any of the species known to me. It appears to be the first species of *Empoasca* described from fig.

***Dikrella (Readionia) gossypii* n. sp.**

Length of both sexes 2.7 mm. Alcoholic material without differentiating color characteristics. Male with pygofer processes short, each curved through 90° near base, apex directed caudodorsad. Style in dorsal aspect with antepical lobe rounded, not pronounced. Connective papilioniform. Aedeagus with preatrium as long as free portion of shaft; shaft broad, strongly convex on ventral margin, tapered abruptly at apex; gonopore antepical on anterodorsal surface; a pair of slender processes arising on dorsal apodeme near base of shaft, extending caudad to midlength of

shaft, parentheses-shaped in ventral aspect, and a pair of broader, longer ventral cylindrical processes arising at base of shaft and extending caudodorsad beyond apex of shaft, crossed antepically in caudoventral aspect. Sternal abdominal apodemes traversing one conjunctiva. Female seventh sternum with hind margin broadly and very slightly convex at middle.

Holotype male and a series of paratypes, Quevedo, Ecuador, October 24, 1955 (H. R. Yust), from cotton, in U. S. National Museum collection (Cat. No. 63036).

This species is related to *bimaculata* Ruppel and DeLong, and to *dentata* Ruppel and DeLong, judging from their illustrations of those species. It differs in having a much broader shaft and in the crossed ventral aedeagal processes.

UNDESCRIBED SPECIES OF NEMATOCEROUS DIPTERA. PART IV.

By CHARLES P. ALEXANDER, Amherst, Mass.

The preceding part under this title appeared in 1953 (Bull. Brooklyn Ent. Soc., 48: 97-103). In the present report I am describing three new species of Ptychopteridae and one Blepharoceridae and am providing further notes on the remarkable Trichocerid fly *Kawasemyia imanishii* (Tokunaga).

PTYCHOPTERIDAE

Ptychoptera chalybeata n. sp.

Size small (wing of male 6 mm.); general coloration of head and thorax black with bluish reflections; femora yellow, the tips narrowly brownish black, tibiae and basitarsi obscure yellow, the tips narrowly darkened; wings whitish, the broad tip and a narrow band at cord brown; abdomen yellow, the posterior borders of the intermediate segments black, the subterminal segments uniformly blackened to form a ring.

Male: Length about 6 mm.; wing 6 mm.; antenna about 3 mm.

Mouthparts, including palpi, light yellow. Front and clypeus brownish black. Antennae moderately long; scape brown, pedicel and first flagellar segment obscure yellow, succeeding segments dark brown, cylindrical, with short verticils. Head black, with bluish reflections.

Prothorax chiefly dark brown. Mesonotum black, with steel blue reflections, most evident on the praesentum. Pleura black.